

Restricted

NAVY DEPARTMENT

BUMED NEWS LETTER

a digest of timely information



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Filariasis: The occurrence of an epidemic of filariasis in naval personnel stationed in the Samoan area has aroused considerable interest and, to a certain extent, created apprehension.

For forty years we have maintained a naval station in American Samoa, and yet not a single case of filariasis had been reported in naval personnel previous to the present war. Soon after the wartime increase of our military forces in Samoa, a considerable number of men stationed there began to manifest transient swellings of the extremities, a

so-called "retrograde" lymphangitis. There were also signs of involvement of the lymphatics of the spermatic cord and scrotum. The attendant pain and disability were not great, but many were fearful that the dreaded end-result, elephantiasis, might ensue.

A major controversy revolved around the diagnosis. Blood examinations failed to reveal microfilaria, and the fact that filariasis previously had not been encountered in presumably similarly exposed military personnel, gave rise to considerable skepticism as to whether or not this disease was filariasis. Subsequent demonstration of adult filarial worms in involved tissues of patients showing characteristic symptoms established beyond reasonable doubt the fact that the disease was of filarial origin.

It was not until the issue concerning the diagnosis had been settled that a true appreciation of the situation was possible. A survey revealed that the disease was occurring in troops on Tutuila, Upolu, Wallis, Funafuti, Borabora, and upon occasion, in troops in the Tonga Islands. The incubation periods varied markedly, cases appearing any time after a month of residence on the islands where filariasis was endemic. Evidences of the disease in the majority appeared only after many months' exposure.

A thorough survey of the situation was made to discover why filariasis had occurred in our personnel at this time when it had not done so before. It was learned that sporadic cases had, in fact, been seen in past years and had not been recognized as filariasis.

In an epidemiological investigation it was found that of the several possible mosquito vectors, A. scutellaris, var. pseudoscutellaris, a day biter, was the principal if not the sole vector of importance. Dissections of mosquitoes of this species caught in native villages showed a high percentage harboring infective forms capable of transmitting the disease. On the other hand, mosquitoes caught a hundred or more yards distant from the native villages showed practically no infective forms. Thus it was demonstrated that the mosquito vector of filariasis flies only short distances from the source of infection. The natives showed a high incidence of filariasis in the form communicable to the mosquito, that is, with microfilaria present in the blood. It therefore became apparent that for transmission military personnel and natives must live in propinquity. Conversely, it was evident that for protection, the two important factors were on the one hand mosquito control and on the other separation of natives from military personnel.

In the early days of the war, troops were sent to these islands in such numbers that it was often impossible to quarter them at safe distances from the natives. Frequently the haste with which these occupational operations had to be carried out made it impossible to accomplish adequate mosquito control measures.

Epidemiologically it is of interest that although the disease exists in natives throughout both the South and Central Pacific areas, it is only in the Central Pacific islands that transmission has been demonstrated in military personnel. The explanation apparently lies in the fact that in the South Pacific islands it has not been necessary to quarter troops in proximity to natives. It is also known that a different mosquito vector is responsible for transmission in the South Pacific. What this vector is remains to be determined. However, it is very likely that it is A. punctulatus, var. moluccensis. Whatever the actual explanation, almost without exception, cases of filariasis encountered up to the present in the New Hebrides and Solomons have been in men formerly stationed in the Central Pacific.

Several factors should operate to limit the further spread of the Central Pacific epidemic: (1) adequate mosquito control, (2) individual protective measures against the vector, and (3) the gradual reduction of the military population of Samoa and the nearby islands with the northward advance of the American forces, allowing proper separation of military personnel and natives. It is evident that there need be no alarm on the part of troops who are going into areas where filariasis is endemic because control is possible by fairly simple measures. The disease will not again become a menace unless a future military situation should enforce upon a group such extraordinary conditions as have prevailed in the past on these islands.

It is too early to predict the future course of the disease in those who have already contracted it. In many individuals removed from an environment where they are subject to repeated reinfection, the clinical manifestations of the disease have subsided with reasonable rapidity. Others have had a number of relapses over long periods of time even after return to the United States. It is well established from past experience in natives and Europeans that it is unusual for elephantiasis to develop except following repeated reinfections over a period of many years. Furthermore, even under such conditions, elephantiasis is a rare complication in Samoan natives. Present directives require removal of patients who appear to have contracted filariasis from endemic areas and thus one would not expect elephantiasis to become a common sequela in such men. In view of these facts, anxiety with respect to future elephantiasis in military personnel who have contracted filariasis, although understandable, is not justified.

Although studies are being carried out at the present time to determine the validity of this belief, the evidence at hand very strongly indicates that under any but extreme conditions the disease does not lead to any damage to the reproductive organs from a functional standpoint. Men suffering from filariasis should be reassured on this point, and their fears must be dissipated as to the possibility of transmission of the disease to others through sexual or other physical contact.

Although repeated blood studies have been made, there has not been a single well-supported instance in which microfilaria have been demonstrated in blood smears from our military personnel. In the absence of blood forms the likelihood of introducing filariasis into areas in the United States where it is not now endemic seems remote, even when the mosquito vectors are abundant. (J.J.S.)

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Potassium Bitartrate in Place of Talcum in the Preparation of Rubber Gloves: It is well recognized that talcum powder when introduced into the body during surgery sets up a granulomatous, inflammatory reaction which may, especially in the peritoneal cavity, produce serious complications. It is difficult to remove all talcum powder from rubber gloves even by careful washing.

Seelig et al recommend the use of potassium bitartrate in place of talcum powder in the preparation of gloves. They find that it is harmlessly disposed of by the body tissues and fluids and causes no consequent peritoneal adhesions. There has been no evidence of irritation or undesirable skin effects on the surgeon's hands.

Potassium bitartrate tends to shorten the life of rubber gloves. Tartrated gloves were found to stand from seven to ten separate sterilizations, whereas gloves powdered with talcum permitted from twelve to twenty. It is important, the authors emphasize, that potassium bitartrate be subjected to no more than fifteen minutes of autoclaving at fifteen pounds steam pressure. (J.A.M.A., Dec. 11, '43.)

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Parenteral Protein Administration: The importance of a constant positive nitrogen balance in wound healing and in resistance to infection has been well established by extensive clinical and laboratory study. The assumption that tissue protein reserves are sufficient to meet ordinary requirements has been proven incorrect by Weech who demonstrated that the plasma protein of dogs maintained on protein-poor diets began promptly to fall and continued downward as long as protein-deficient diets were fed. The fall was in the albumin fraction, the globulin fraction remaining relatively constant. In the normal fasting human, a nitrogen deficit rapidly appears and, if not promptly corrected, a decrease of plasma protein follows. Estimation of the serum protein does not always give a true picture of the plasma protein loss, as reduction in plasma protein may, at first, be accompanied by a proportionate decrease in blood volume with the amount of protein per unit of blood remaining constant.

While it is generally agreed that during convalescence every effort should be made to maintain a positive nitrogen balance by oral feeding of protein foods,

there are many instances when adequate intake by this route is impossible. In practically all cases of severe injury or illness and following major surgery, an interval of days or weeks may elapse before oral feeding of protein in adequate amounts is possible.

Early investigators working in the field of protein metabolism determined the chemical structure of amino acids and established their biochemical role as the building stones of protein. Subsequent investigation has indicated that there are ten amino acids essential to life and growth and the synthesis of these amino acids has been accomplished. More recent work has shown that when amino acids in proper mixture are administered orally or parenterally, synthesis to blood and tissue protein occurs, and, when given in adequate quantity, positive nitrogen balance results.

Elman, in 1939, first administered to humans an amino-acid mixture obtained by the acid hydrolysis of casein. This mixture was found deficient in one of the essential amino acids, tryptophane, which is apparently unstable and is destroyed by this method of hydrolysis. All the essential amino acids plus some of those which may be synthesized by the body (non-essential), along with polypeptides, are contained in the enzymatic hydrolysates of casein. An enzymatic hydrolysate of casein and pork pancreas produced by Mead Johnson and Company (Amigen), has been used extensively in experimental and clinical work, and, at present, is the only preparation available in quantity, which is well utilized and will maintain nitrogen balance.

The pure crystalline amino acids have been produced in small quantity for experimental study. These substances are chemically pure and thus can be used in variable proportions, a point which may eventually prove to be of advantage in meeting certain specific amino-acid requirements. The crystalline amino acids may be injected in higher concentration and at a more rapid rate than casein hydrolysate, thus facilitating the administration of the desired amounts in brief injections of one to two hours' duration. Plasmaphoresis experiments by Whipple also indicate that a mixture of crystalline amino acids (Rose's mixture plus glycine) produces a higher rate of plasma regeneration than the hydrolysates. Although these advantages would appear to establish the crystalline amino-acid mixtures as the preparations of choice for parenteral nitrogen administration, these substances cannot now be produced in sufficient quantity for general clinical use.

Nitrogen-balance studies have been made in connection with many abnormal conditions, and large deficits have frequently been observed.

The nitrogen loss in severe burns is often as much as 30 Gm. per day. A total protein deficit of 2,000 Gm. occurring in one severely burned patient required the administration of 6,000 Gm. of protein before nitrogen balance was attained, plasma protein regenerated and clinical edema relieved.

Following major surgical procedures, 20 to 25 Gm. of nitrogen may be lost per day for a variable period of time. Gastrointestinal surgery attended by dietary restriction over an extended period of time gives rise to large protein deficiencies. Nitrogen deficits are frequently observed in cases of peptic ulcer when accompanied by impaired ingestion, obstruction or hemorrhage, in severe colitis and in malignancies of the gastrointestinal tract.

Severe wounds and fractures are accompanied by nitrogen deficits of varying degrees related to the amount of tissue destruction, and loss of blood and plasma. Post-operative wound disruption has been found to occur more frequently in patients as well as in laboratory animals having low plasma proteins.

Whipple has found that when hemorrhage has occurred, the regeneration of plasma proteins is retarded. He believes this to be due to a priority which the regeneration of hemoglobin appears to have on available protein. Hence, primary attention must be given to the rapid return of hemoglobin to normal levels, by repeated transfusions if necessary, before satisfactory plasma regeneration and nitrogen balance can be expected.

Recent observations attach increased importance to the maintenance of nitrogen balance in combating infection. Nitrogen deficits of varying degree relative to the severity of the infectious processes have been observed. Further study of amino acids may reveal specific combinations of these units as most efficacious in the formation of antibody factors. The action of the chemotherapeutic agents, the sulfonamides and penicillin, has been observed to be enhanced by the maintenance of nitrogen balance. Thus the desirability of optimum protein intake during infections extends the field of application of amino-acid preparations to many serious, acute and chronic surgical and medical conditions, in which an adequate amount of protein cannot be taken orally.

The exact protein requirement of a patient can be calculated by determining the nitrogen balance. As this requires quantitative determination of total nitrogen output, it is not practicable for general clinical application. For practical purposes several simple principles permit a satisfactory approximation of the amount of protein required.

To arrive at this approximation one must have knowledge of (1) the physical condition of the patient, (2) the past dietary history, (3) the severity of the injury or disease with respect to protein loss and destruction, (4) the patient's normal daily protein requirement calculated on the basis of one gram of protein per kilogram of body weight.

As previously indicated, the nitrogen loss in the urine alone may be as much as 30 grams per day. In terms of protein loss this amounts to 6.5×30 or 195 Gm. Hence, the protein required for an individual patient whose normal weight is 70 Kg. will range from 70 Gm. to 200 Gm. The amount to be

administered, selected from within this range, may then be decided on the basis of such knowledge as indicated above.

When the approximate protein requirement has been thus estimated the amount of amino acid substance to be administered parenterally may easily be calculated by subtracting from the total requirement the whole protein which the patient is able to utilize by the oral route. The balance is the amount to be supplied as amino acids. For practical purposes one gram of amino acid substance (Amigen) may be regarded as equivalent to one gram of protein.

In order that the protein administered may be used entirely for regeneration of blood and tissue protein, it is necessary to meet the patient's basal caloric requirements with glucose. However, Elman has found that, in the well nourished individual, nitrogen balance can be maintained and ketosis prevented, upon administration of amino acids when as little as 25 per cent of the basal requirement is covered with dextrose, the remaining 75 per cent being supplied by catabolism of body fat.

Administration of such mixtures parenterally may be by separate multiple injections at convenient intervals or by continuous intravenous drip during the 24-hour period.

No serious nor anaphylactic reactions due to amino-acid preparations have been reported. The most frequent reactions observed are flushing, headache, nausea and vomiting. These reactions are related to the speed of injection and occur at slower rates of injection of the hydrolysates than of the crystalline amino acids. It is believed that certain non-essential amino acids contained in the hydrolysate may be responsible for these reactions. These are not serious reactions and are promptly relieved by slowing the rate of injection.

The procurement of the enzymatic hydrolysate of casein (Amigen-Mead Johnson and Company) has been recommended. It is hoped that an announcement of the availability of this item may soon be made. A letter of information and instruction is planned for publication at the time of this announcement. (J.F.C.)

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Oral Vaccines for Colds: "Recent communications to the offices of the American Medical Association indicate that the prescription and sale (oral) cold vaccines is again taking place on a large scale. This, in the face of the recognized lack of scientific evidence for the value of these preparations, is indication of irresponsibility on the part of some manufacturers of pharmaceuticals. The scientific evidence against the value of oral cold vaccines is overwhelming; consequently, individual physicians and firms who deal in pharmaceuticals and who lend themselves to wholesale uncontrolled distribution of such preparations are perpetrating an unwarranted commercial assault on the public pocketbook." (Current Comment, J.A.M.A., Jan. 22, '44.)

Chemotherapy of Venereal Diseases: Commander A. J. Pereyra (MC), USNR, working with Senior Surgeon J. F. Mahoney, U.S.P.H.S., at the U. S. Marine Hospital, Staten Island, N. Y., reports that penicillin produces satisfactory healing in the lesions of granuloma inguinale.

In scrapings from the ulcerations on the external genitals and adjacent skin of patients with this disease, macrophages can be found, containing numerous small bacilli, Klebsiella granulomatis. These organisms, first described by Donovan, and therefore sometimes called Donovan bodies, are Gram-negative, encapsulated, oval and diplococcoid, can be cultivated readily on Sabouraud's and other media, and in cultures resemble the Friedlander bacillus. Although these organisms are almost always present in granuloma inguinale, it is possible that they are secondary invaders rather than the primary cause of the disease.

It has not been determined whether or not this favorable effect of penicillin is brought about by its action on the Klebsiella granulomatis per se.

On the other hand, in Commander Pereyra's experience penicillin has been of value neither in the treatment of lymphogranuloma inguinale (lymphopathia venereum), nor in the treatment of chancroid.

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Host Factor in Clinical Sulfonamide-Fastness: Mahoney reports that human volunteers have been inoculated with pure cultures of gonococci. A discovery of great interest is that when a number of men are inoculated with the same strain, the organisms in one individual may be sulfonamide-resistant and in another sulfonamide-susceptible. Apparently there is a host-factor to be reckoned with in clinical sulfonamide-fastness, and clinical resistance to the drug does not depend solely upon changes in growth characteristics of the organisms demonstrable in vitro.

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Chemotherapy of Plague: The efficacy of sulfonamides in mice artificially infected with plague has been demonstrated by Meyer (M. Clin. North America, May '43.). Sulfadiazine and sulfathiazole were found to be most effective. The necessity for the institution of early therapy was demonstrated by the fact that mice treated at the time of the appearance of symptoms recovered, while those in which treatment was delayed died. Animals treated for only five days appeared at first to recover but relapsed and died about 20 days later of plague pneumonia; those survived which were treated for 10 days after subsidence of symptoms. Many animals treated with the sulfonamides were culturally negative, but died with lesions microscopically typical of plague. This might be taken as an indication that serum should be used in conjunction with sulfonamide therapy.

According to recent reports from India the case fatality rate in 147 cases of plague was reduced to 22.4 per cent in the bubonic cases and 41.9 per cent in the septicemic cases when patients were treated early and intensively with sulfathiazole. The mortality in the controls treated with iodine intravenously was 53.6 per cent in the cases of bubonic plague and 90.8 per cent in cases with plague septicemia.

In Madagascar, Meyer reports that Girard cured 15 out of 19 adults treated with sulfapyridine or sulfanilamide. In fact of a total of 37 patients with bubonic plague receiving these drugs with or without serum, only nine died, making a recovery rate of 76 per cent. Both experimental and clinical experiences, however, suggest a continuation of treatment on doses of from 1 to 2 Gm. for at least 12 days after the fall of the temperature. There is unanimity in the belief that early and intensive treatment alone effected the cures thus far reported. The effect of treatment by serum combined with sulfonamides is still under trial, but in Girard's experiments on guinea pigs treatment by serum and sulfapyridine showed no superiority over the drug alone.

At a recent meeting of the Subcommittee on Tropical Diseases of the National Research Council, Meyer reported the following two cases: A 2-1/2 year old girl with plague was given sulfadiazine for a total of 16 days. A week after treatment was stopped, she developed a temperature of 105°, and quickly died of plague meningitis. A second case of plague in a boy 11 years old was reported. Sulfadiazine in dosage of 3.5 Gm. was given every 6 hours for 5 days, producing a blood level of 8 to 10 mg. per 100 c.c. of whole blood. Subsequently, sulfadiazine (2.0 Gm.) was given every 6 hours for 14 days, the drug being continued for 10 days after the temperature became normal. The patient received 50 c.c. of sheep antiplague serum on the fifth and sixth days. Recovery was complete and uneventful, with rapid resolution of enlarged and suppurating axillary lymph nodes. (F.T.N.)

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Proper Terminology in Bacillary Dysentery: Many times during this war there have been explosive outbreaks of dysentery among troops. Although many of these epidemics have clinically resembled bacillary dysentery, the lack of bacteriological facilities under combat conditions has usually prevented the determination of the specific causative organisms. The official diagnostic nomenclature of the Navy contains for this disease only the heading Dysentery, Bacillary, #901, but it is of considerable importance to record in the health record the strain with which the individual is infected. If one of the more virulent strains is recorded or if the carrier state should develop, the patient would be treated differently during recurrences. In view of the wide variations in virulence exhibited by the various strains, the epidemiological importance of properly recording such data is obvious. The present terminology was adopted within recent years in an attempt to simplify a previously confused nomenclature. In this classification the most

virulent and dreaded strain, commonly designated as "Shiga", is properly termed "Shigella Dysenteriae." Bacteriologically this bacillus is characterized by its inability to produce acid in mannite broth. The remaining organisms, sometimes called the "Paradysentery group", are properly recorded as follows: "Shigella flexneri", "Shigella sonnei", "Shigella ambiguus", "Shigella newcastle", "Shigella alkalescens", and "Shigella dispar."

Chemotherapy of Bacillary Dysentery: On the basis of data then available, the National Research Council in January 1942, recommended sulfaguanidine in the treatment of bacillary dysentery. Subsequent studies have shown that this drug is so insoluble as to be largely therapeutically inert, many cases having as much as nine-tenths of the drug contained in the bowel in crystalline form. The absorbable sulfonamides are much to be preferred, sulfadiazine being the first choice, with sulfathiazole as second. The recommended dosage of sulfadiazine or sulfathiazole is 2.0 Gm. initially, with 1.0 Gm. every 6 hours until symptoms have subsided, or until two successive stool cultures have been negative. The Flexner strain is so sensitive to these drugs that the dosage may be reduced to half of that recommended above. The Sonne strain frequently develops resistance to other sulfonamides to a greater extent than to sulfasuxidine. A change to this drug is desirable if poor results have been obtained after a week of treatment with another sulfonamide. (F.T.N.)

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Rationing of Water and Food by Shipwrecked Personnel: It is expected that in the next few weeks the Bureau of Medicine and Surgery will present, in such generally circulated Navy publications as the Naval Aviation News, instructions regarding the rationing of food and water on lifeboats, rafts and floats. The following paragraphs summarize these instructions and the information on which they are based. The instructions presented here are those specifically for survivors on inflatable life rafts; they are, however, applicable in all respects to lifeboats and drum-type rafts.

Summary of advice dealing with water:

1. Be sure you take a drink of water before starting off on a mission.
2. Unless it is immediately obvious that the procedures will make you cold, if forced down, conserve body water by the following measures, which should be temporarily discontinued when they result in sensations of chilliness:
 - a. Perform no unnecessary exertion.
 - b. Remove, but do not discard, all clothes save those necessary to protect you from sunburn. Unbutton the front of your shirt.
 - c. Expose your body thus clothed to the breeze as much as possible.
 - d. If you can, rig an awning protecting you from the sun but not interfering with the breeze.
 - e. Keep your clothes constantly wet with sea water during the day.

3. Unless you become thirsty, drink no water for the first 24 hours on the raft.
4. Thereafter, drink one pint (16 ounces) of water a day if your supply is limited; drink a pint and one-half (24 ounces) a day, or more if necessary, if you have an abundant supply of rain water and the one pint allowance does not satisfy your thirst.
5. When you have only about 10 ounces of water left, use it merely to moisten your mouth and sip until rain is encountered.
6. In the event of rain, when you have been on a very limited ration of water, drink your fill slowly over the course of about 1 hour; next day return to your usual daily allotment of one pint.

Summary of advice dealing with solid food:

1. Eat daily approximately the amount recommended for the particular ration with which you are supplied.
2. The flesh and entrails of fish, turtles and birds are valuable foods; but do not eat them in large quantities unless you have an abundance of water.
3. If your ration of water is less than one and one-half pints a day, eat only small quantities of flesh - say 10 one-inch cubes, equal to 5 ounces, daily. If the fish is a shark or dogfish, eat only 4 such cubes a day. If your water ration is very small or if you have no water, you may find that even these small amounts of fish or bird flesh may increase your thirst, in which case you should not eat them at all.
4. Eat no dried flesh or entrails unless you are drinking a quart (32 ounces) of water a day. Reduce the amount eaten if it makes you persistently thirsty.
5. Fish flesh should be regarded not as a source of water but as a solid food.

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The rationale of the measures used to reduce evaporative water loss to a minimum was discussed in the Bumed News Letter of January 7, 1944. It was pointed out that each day 1,500 c.c. or more of body water can be lost unnecessarily during calms in tropical waters because of excess evaporation of water from the skin; these losses are insidious in that they may occur even though no sweat is observed on the skin.

Experiments on subjects on pneumatic life rafts conducted by the Naval Medical Research Institute have substantiated laboratory evidence that when the evaporative water loss of semi-fasting men is maintained at a minimum, the daily requirement of water lies between 500 and 1,000 c.c. The 710 c.c. (24 ounce) figure was taken arbitrarily as a convenient average; 16 ounces is regarded as an absolute minimum and is likely to be insufficient to maintain completely hydration in some men. The water balance of fasting men may be stated roughly as follows: available to body, 710 c.c. as drinking water, and

300 c.c. as water freed from tissue as it is being consumed and water derived from subsequent oxidation of that tissue; lost from body, 450 c.c. as urine, and 750 c.c. as water, unavoidably evaporated from lungs and skin. It is not harmful if the balance is slightly negative, since the body is consuming its tissue and can dispense with the water formerly incorporated in that tissue.

If a man has been afforded a chance to drink his fill of water a short while before abandoning ship, part of the water drunk during the ensuing 24 hours will be wasted as relatively dilute urine. On the other hand, dehydrated subjects can drink large quantities of water (from rain, for example) without subsequently wasting a significant amount of it as urine. When the supply of water is very limited, it seems wiser to maintain maximum strength as long as possible and to issue the extreme minimum requirement (16 ounces) daily until only 10 ounces is left, rather than to issue smaller amounts over a longer period of time.

Within the next few months a chemical kit for demineralizing sea water, produced by the Permutit Company in collaboration with the Naval Medical Research Institute, will be placed in the Bureau of Aeronautics life rafts; it will increase by about nine times the amount of water available per unit volume of storage space. The use of sea water to dilute fresh water has not been demonstrated to offer any significant benefit. The procedure is not recommended. The use of undiluted sea water by mouth or rectum is of course contraindicated.

The Bureau of Ships life floats are at present stocked with a solid ration of canned luncheon meat, biscuits, and malted milk. There is evidence that this is not a satisfactory emergency ration. The Bureau of Aeronautics is now procuring the new Naval Medical Research Institute Tablet Emergency Ration. This ration is composed of high fat butterscotch and hard candy tablets (both of which contain citric acid), malted milk tablets, multiple vitamin tablets and chewing gum. This ration is 84 per cent carbohydrate and 12 per cent fat. In the Bumed News Letter for June 11, 1943, it was indicated that such a combination produces a ration which is palatable in the presence of thirst and which, since it is low in protein, does not create significant amounts of urea which requires water for excretion. Dr. A. M. Butler of the Harvard Medical School has demonstrated that the inclusion of fat in a candy renders it less nauseating. He has shown also that fasting volunteers drinking 400 c.c. of water a day lose less weight and less body water and are more vigorous when to their regime is added 50 Gm. of sugar and 50 of fat than when the addition consists of 100 Gm. of water. These findings indicate that the most satisfactory ration for survivors is one consisting of 100 Gm. daily of a mixture of carbohydrate and fat; Dr. Butler favors a special high fat butterscotch candy for this purpose.

Experiments conducted by Dr. J. P. Peters of the Yale Medical School, in cooperation with the Wright Field Aero-Medical Laboratory, demonstrated that fish flesh contains barely enough water, possibly not quite enough, to carry away in the urine the metabolic products of the fish protein. Therefore, while fish

and birds are valuable food, they should be eaten only in small amounts when the intake of water is limited. Since dried flesh makes even less of a contribution of water, it should not be eaten unless water is abundant.

The majority of those who have reported their attempts to wring or squeeze "water" out of fish have been unsuccessful. Mechanical presses are required to express tissue juice from fish; the content of salt and protein of juices expressed by some presses is so high as to render them of questionable value to the body as sources of water. Fish is not to be regarded as a source of water.

The inclusion of scopolamine in 0.6 mg. (gr. 1/100) tablets in the first-aid kits of life rafts of vessels and aircraft was reported in the Bumed News Letter of October 15, 1943. Seasickness may increase the water lost by survivors and may interfere with the operating of raft paraphernalia, such as signaling devices. Personnel should be instructed that, if shipwrecked, they should immediately examine their raft's first-aid kit to ascertain whether it contains a preventive of seasickness. One of the tablets should be swallowed if the water is rough. Subsequently, the tablets should not be taken more often than every 6 hours. After the first 24 to 48 hours, acclimatization to the motion of the raft will probably occur and further use of the tablets will not be necessary. If morphine has been administered, then scopolamine should not be taken until about 24 hours have passed. (P.H.F.; W.V.C.; N.P.)

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The Portsmouth Naval Prison - Rehabilitation: The success of the reclamation program at the Portsmouth Naval Prison under the direction of Commander Thomas H. Pargen (MC), USNR, is shown by the fact that 86 per cent of its inmates annually are rehabilitated and returned to active duty.

Prisoners arriving at Portsmouth are first subjected to a painstaking psychiatric appraisal in an effort to find, and if possible eradicate, the maladjustments underlying their offenses. Aptitude studies have proved useful in placing men at crafts which they like and in which they show ability. Machine, carpenter, electrical, plumbing and paint shops are available for vocational training. There are possibilities also for work in welding, wireless operating, tailoring, shoe-making, bookbinding, laundering, cooking, etc. Men who continue to show skill and interest in their work may be given advanced instruction in schools of technical training, among which are the radio, electrical, signaling and seamanship schools. In the average case a third of the sentence is revoked for good conduct.

An innovation that has shown most gratifying results is the establishment of the Special Honor Company, composed of men who have less than two months to serve before being restored. The men of this company are picked competitively, that is, by their work records, conduct, neatness, smartness in drill, application in class, etc. This company has done much to establish self-confidence and self-respect among its members and has made a major contribution towards improving the general morale.

The Honor Company is housed by itself in a barracks on a separate part of the reservation. The young Marine Officer, whose part in the Rehabilitation Program is acting as Commanding Officer of this company, lives in the barracks with them. The entire routine is the exact counterpart of barrack life anywhere in the Service. The men wear blue undress jumpers with their gray trousers, which distinguish them from all the rest. They salute officers, mount guard, etc. The "esprit de corps" is of the highest.

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Need for Medical Officers of Regular Service as Flight Surgeons: The tremendous expansion in the carrier building program and the increase in size and number of shore establishments of the aeronautical organization has placed a heavy demand upon the Bureau for flight surgeons of administrative rank (lieutenant commanders and commanders, regular Service), for assignment as senior medical officers to the larger aircraft carriers and to administrative positions ashore. To meet these requirements the Bureau is anxious to assign such officers to training in aviation medicine at the earliest date practicable.

In general it will be the policy to assign Reserve Medical Officers of administrative rank already qualified as flight surgeons or aviation medical examiners to the smaller carriers as senior medical officers and to other administrative duties commensurate with their naval experience.

Interested officers should submit to the Chief of the Bureau of Medicine and Surgery letters of application requesting training in aviation medicine. (W.J.C.A.)

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Public Health Report:

<u>Disease</u>	<u>Place</u>	<u>Date</u>	<u>Number of Cases</u>
Plague	Belgian Congo	Nov. 20-27, '43	8 (7 fatal)
		Nov. 27-Dec. 4, '43	2 (2 fatal)
	British East Africa		
	Kenya	Dec. 4-11, '43	1 (1 fatal)
	Ecuador, Loja Prov.	Nov. 1-15, '43	1 (1 fatal)
	Egypt, Suez	Nov. 13-20, '43	12 (4 fatal)
		Nov. 20-27, '43	7 (3 fatal)
		Nov. 27-Dec. 4, '43	10 (8 fatal)
		Dec. 4-11, '43	15 (12 fatal)

Public Health Report: (cont.)

<u>Disease</u>	<u>Place</u>	<u>Date</u>	<u>Number of Cases</u>
Plague	Egypt, Suez (cont.)	Dec. 11-18, '43	39 (27 fatal)
		Dec. 19-22, '43	11
	Hawaii, T. H.	Year 1943	7 (fatal)
Smallpox	Madagascar	November 1943	2 (2 fatal)
	Algeria	Nov. 1-10, '43	102
Typhus Fever	Morocco (Fr.)	October 1943	58
	Ecuador	Nov. 1-15, '43	9
	Hungary	Dec. 4-11, '43	19
	Morocco (Fr.)	October 1943	53
	Rumania	Dec. 8-15, '43	152
	Slovakia	Nov. 20-27, '43	15
		Nov. 27-Dec. 4, '43	15
	Spain	Oct. 31-Nov. 6, '43	9
	Trinidad Port-of-Spain	Sept. 16-30, '43	1
Yellow Fever	Colombia	Nov. 21-Dec. 11, '43	13 (fatal)
	Gold Coast		
	Tamale	Nov. 23, '43	1 (suspected)
	Portuguese		
	Guinea	Dec. 18-25, '43	3+
	Senegal	Nov. 13, '43	1
		Nov. 11-20, '43	1 (fatal)
	Sierra Leone		
	Gallinas	Dec. 1, '43	1 (fatal) 1 (suspected)

(Pub. Health Rep., Jan. 14, 21, '44.)

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Teaching Films for Hospital Corpsmen: Under the general title, CARE OF SICK AND INJURED BY HOSPITAL CORPSMEN, BuMed is producing a series of sound motion pictures (MN-1511-(a) to (j)) showing the proper technic of the more common nursing procedures. These films, of which eight are now available, should be seen by all Hospital Corpsmen and used as an integral part of their training program.

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Supplemental List of Medical Films: A new catalog of medical films has just been distributed. Copies are available on request to BuMed. The following new films are now available: (See Bumed News Letter, May 28 and September 17, 1943, for lists of other films.)

MN-2361 G and You (Color - 50 min.) Confidential.

MN-2396 a & b Physical Examination for Navy Flying Personnel (B & W - 31 min.) The technic of Physical Examination for Navy Flying Personnel is depicted in detail. This film is a revision of an Army film on the same subject.

MA-3273 First Aid for Chemical Casualties (B & W - 18 min.) This film is intended for basic indoctrination of all Army personnel in First Aid for Gas Casualties. It should serve the same purpose for Navy personnel. This film replaces "First Aid for Gas Casualties" (MA-1241).

MN-2479 Factors Concerned in the Construction of Full Mandibular and Maxillary Dentures (Color - 40 min.) By actual photography the exact technic of taking impressions for dentures for a completely edentulous patient is shown.

SN-2204 Radiodontics (Sound - 39 Frames - 20 min.) The X-ray appearance of the common tooth changes are shown and described in detail. The value of the X-ray to the Dental Officer is emphasized. Of interest to all Dental Officers.

MN-2153a Evaluation of Physical Fitness by the Step-Up Test (B & W - 20 min.) The technic of performing the Step-Up Test for physical fitness is shown in detail by actual photography and the necessary calculations are described.

MN-2617 Life Cycle of Endamoeba Histolytica (Color- Silent- 15 min.) By means of animation, the life cycle of the Endamoeba Histolytica and the pathological changes which it produces in the human body are shown.

MN-2222e Pick Your Chances (Formerly Called "Sick Bay") (B & W - 30 min.) This film is one of a series of films designed for Boot Training. It impresses the enlisted man with the necessity of promptly reporting any injury or illness to the Medical Officer. It should be seen by all enlisted personnel as soon after entering the Navy as possible.

MN-1511 Care of the Sick and Injured by Hospital Corpsmen (B & W)
This series of films was produced specifically for the instruction of Hospital Corpsmen in nursing procedures and technics.

MN-1511b Morning Care (7 min.) Depicts the duties of a Hospital Corpsman in the morning care of patients on a hospital ward or sick bay.

MN-1511c Bathing the Bed Patient (19 min.) Depicts the technic of giving bed patients a bath and technic of making the bed.

MN-1511d Beds and Appliances (10 min.) Depicts the various beds and appliances commonly used in sick bay and hospital ward care of patients. Technic for making a bed and bunk is shown in detail.

MN-1511e Evening Care (7 min.) Depicts the technic of giving a back rub and the routine evening care of hospital or sick bay patient.

MN-1511g Taking a Blood Pressure (7 min.) Depicts the technic of taking and recording blood pressure.

MN-1511h Post-Operative Care (12 min.) The essential points in the post-operative care of patients are shown.

MN-1511i Temperature, Pulse, and Respiration (14 min.) The exact technic for taking temperature, pulse and respiration on a single patient and on a number of patients in a ward is shown. The method of charting temperature, pulse and respiration is also shown.

MN-1511j Oral Medications (7-1/2 min.) The proper technic of giving and charting medications prescribed for hospital or sick bay patients and the recording of the medications is shown.

MN-1509 Bluejackets' Personal Hygiene (B & W - 20 min.) A review of the basic principles of personal hygiene. Of general interest to all male naval personnel.

MN-1712a Personal Hygiene for Women (Restricted) Part I (B & W - 44 min.) Depicts the general measures necessary to insure good health, including a balanced routine of sleep, exercise and relaxation. High standards of personal cleanliness and good grooming are emphasized. By means of animated sequences, the anatomy and physiology of the female reproductive organs are shown. This film should be seen by all WAVE personnel.

MN-1712b

Personal Hygiene for Women (Restricted) Part II (B & W - 32 min.) This film depicts the hygienic measures necessary to prevent the spread of contagious diseases. A portion of the film is devoted to venereal disease. This film should be seen by all WAVE personnel.

MA-2689

Purification of Water (B & W - 19 min.) The purification of water by the accepted field methods is depicted in detail. This film is of interest to all Advance Base personnel.

MA-2820

Military Sanitation - Disposal of Human Waste (B & W - 18 min.) The correct sanitary measures for the disposal of human waste at Advance Bases is shown. Of interest to all Advance Base personnel.

SN-1934

Musca Domestica - The Fly (Field Sanitation Series) (68 frames with sound - 7 min.) By drawings, the spread of filth and disease by the house fly is vividly depicted. It is not a technical film and is of interest to all personnel. Useful for indoctrination in Field Sanitation.

MN-1724b

Skeletal Fixation by the Stader Splint - Fractures of the Os Calcis (B & W - 10 min.) The technic of the application of the Stader Splint for a fracture of the os calcis and the necessary pre-operative and post-operative care is depicted. An animation sequence shows the displacement which occurs in a fracture of the os calcis and the steps necessary for the reduction of such fractures.

MN-1901

Skeletal Fixation for Fractures of the Mandible (Color - 10 min.) The technic of application of the Roger Anderson Splint for fractures of the mandible is shown.

MN-2477

Eye Surgery - Treatment for Paresis of the Superior Oblique (Color- Silent- 7 min.) The technic of the operation for advancement of the superior oblique ocular muscle is shown on an actual case.

Routine distribution of all films listed is on a loan basis. Copies of the films are deposited in Training Aids Libraries and are available on request. Such requests from shore stations should be addressed to the Senior Medical Officer of the cognizant Naval District, Air Training Command, or Potomac and Severn River Commands.

* * * * *

Special Clothing for Naval Personnel: The standard special clothing allowance list for naval personnel has recently been revised by VCNO Serial 6050-A, 15 Jan 1944, which supersedes VCNO Serial 21511-G, 29 Jul 1943. The special clothing list for the various zones consists of the following standard articles:

Tropical Zone

(a) Individual Allowances (Men)

1 Jacket, parka, rain N-2	1 Helmet, Sun N-3
1 Trousers, Rain N-2	2 Shoes, Field N-1
2 Jackets, Utility N-3	2 Gloves, Work N-1
3 Trousers, Utility N-3	2 Gloves, Mosquito N-2
3 Shirts, Utility N-3	1 Glasses, Sun N-1
2 Caps, Utility N-3	1 Bag, Special Clothing N-1

(b) Individual Allowances (Women)

1 Coat, Parka, Rain, Women's WN-2	1 Glasses, Sun N-1
2 Shoes, Field, Women WN-1	1 Helmet, Sun N-3
	2 Gloves, Mosquito N-2

Temperate Zone

(c) Individual Allowances (Men)

1 Jacket, Parka, Rain N-2	1 Trousers, Winter N-1
1 Trousers, Rain N-2	2 Caps, Utility N-3
2 Jackets, Utility N-3	1 Arctics, Shore N-2
3 Trousers, Utility N-3	2 Shoes, Field N-1
3 Shirts, Utility N-3	2 Gloves, Work N-1
1 Jacket, Winter N-1	1 Bag, Special Clothing N-1

(d) Individual Allowances (Women)

1 Coat, Parka, Rain, Women's WN-2	1 Trousers, Winter N-1
2 Shoes, Field, Women's WN-1	4 Drawers, Winter, Women's WN-1
1 Arctics, Women's WN-1	4 Undershirts, Winter Women's WN-1
1 Jacket, Winter N-1	2 Gloves, Winter, Women's WN-1

Cold Zone

(e) Individual Allowances (Men)

1 Jacket, Parka, Rain N-2	1 Helmet, Winter N-1
1 Trousers, Rain N-2	1 Helmet, Winter N-2
1 Jacket, Winter N-1	2 Shoes, Field N-1
1 Trousers, Winter N-1	1 Arctics, Shore N-2
1 Coat, Parka, Winter N-1	2 Gloves, Work N-1
2 Jackets, Utility N-3	1 Mittens, Waterproof N-1

Cold Zone (cont.)

(e) Individual Allowances (Men)

3 Trousers, Utility N-3
 3 Shirts, Utility N-3
 2 Caps, Utility N-3

1 Mittens, Winter N-2
 4 Socks, Winter N-1
 1 Bag, Special Clothing N-1

(f) Individual Allowances (Women)

1 Jacket, Winter, Women's WN-1
 1 Trousers, Winter, Women's WN-1
 1 Jacket, Parka, Rain, Women's WN-2
 1 Trousers, Rain, Women's WN-2
 1 Helmet, Winter N-1
 1 Helmet, Winter N-2
 4 Undershirts, Winter, Women's WN-1

4 Drawers, Winter, Women's WN-1
 4 Stockings, Winter, Women's WN-1
 4 Anklets, Winter, Women's WN-1
 2 Shoes, Field, Women's WN-1
 2 Gloves, Winter, Women's WN-1
 1 Arctics, Women's WN-1
 1 Coat, Parka, Winter, Women's WN-1
 1 Bag, Special Clothing N-1

Arctic Zone

(g) Individual Allowances (Men)

1 Jacket, Parka, Rain N-2
 1 Trousers, Rain N-2
 1 Jacket, Winter N-1
 1 Trousers, Winter N-1
 1 Coat, Parka, Winter N-1
 1 Helmet, Winter N-1
 1 Helmet, Winter N-2
 1 Mask, Face, Winter N-1
 2 Shoes, Field, N-1
 1 Arctics, Shore N-2
 1 Bag, Sleeping N-1

1 Boots, Sea N-1
 2 Mittens, Work N-3
 1 Mittens, Winter N-2
 1 Mittens, Waterproof N-1
 1 Goggles, N-1
 1 Scarf, Winter N-1
 1 Sweater, Winter N-1
 4 Undershirts, Winter N-1
 4 Drawers, Winter N-1
 4 Socks, Winter N-1
 1 Bag, Special Clothing N-1

(h) Individual Allowances (Women)

1 Jacket, Winter, Women's WN-1
 1 Trousers, Winter, Women's WN-1
 1 Jacket, Parka, Women's Rain WN-2
 1 Trousers, Rain, Women's WN-2
 1 Helmet, Winter N-1
 1 Helmet, Winter N-2
 1 Scarf, Winter N-1
 2 Mittens, Work N-3
 4 Undershirts, Winter, Women's WN-1

4 Drawers, Winter, Women's WN-1
 4 Stockings, Winter, Women's WN-1
 4 Anklets, Winter, Women's WN-1
 2 Shoes, Field, Women's WN-1
 2 Gloves, Winter, Women's WN-1
 1 Arctics, Women's WN-1
 1 Coat, Parka, Winter, Women's WN-1
 1 Bag, Special Clothing N-1
 1 Bag, Sleeping N-1

Such items of clothing as are required by naval personnel may be drawn from supply officers assigned to duty with units at overseas bases beyond continental limits.

The purpose of providing special clothing is to insure adequate protection under various climatic conditions to naval personnel assigned to duties involving continued or frequent exposure to weather conditions where the standard articles of uniform do not provide adequate and suitable protection. Special clothing is the property of the government, and necessary measures should be taken for its proper care and for its return, when no longer needed, to the supply officer for renovation and reissue. Only those articles which are required by local conditions consistent with the duties performed should be requested.

The clothing prescribed by the VCNO letter mentioned above is based on a study of the climatic conditions in the various areas where the naval personnel may be serving. This letter should be consulted for detailed information.

The availability of some of the items of clothing may be delayed for a short interval as the volume of production is not yet sufficiently great to create the necessary reserve stock. (L.L.A.)

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To: All Ships and Stations.

BUMED-X-FEW-III

L8-2/JJ57(042-43)

Subj: Penicillin Therapy of Gonococcus Infections, Modification of.

23 Feb 1944

Ref: (a) BuMed Ltr of Information and Instruction L8-2/JJ57(042-43)
7 Jan 1944.

1. Evidence is conclusive that penicillin has a more rapid and certain therapeutic action in gonococcus infections than have the sulfonamides.

2. Since the saving of man-days in our fighting forces is of paramount importance to the war effort, the use of penicillin in the primary treatment of gonococcus infections, where feasible, is indicated.

3. Therefore, in men whose services are urgently needed and where penicillin is available in quantities exceeding requirements for the lifesaving therapy of acute fulminating infections, the use of penicillin as the primary chemotherapeutic agent alone or in combination with a sulfonamide is authorized for the treatment of gonococcus infections.

4. The above modifies and supersedes the restriction of penicillin therapy of gonococcus infections to those proven sulfa-resistant (ref. a).

--BuMed. Ross T. McIntire.

To: All Ships and Stations.

Op13C-jc
Serial 42513
SO1231 12
17 Jan 1944Subj: U. S. Naval Medical Research Unit No. 1,
Redesignation of.

1. In order that the designation of the Naval Laboratory Research Unit No. 1, Berkeley, California, may more aptly describe its function as an integral organization with specially trained personnel and the equipment and supplies necessary to operate a medical research laboratory, it is hereby established under a medical officer in command and redesignated

U. S. Naval Medical Research Unit No. 1, Berkeley 4, California.

This is an activity of the Twelfth Naval District.

2. Bureaus and offices concerned take necessary action.

--SecNav. James Forrestal.

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To: All Ships and Stations.

Op13C/whl
Serial 30713Subj: Instructions for Granting Pratique -
Ports of Cristobal and Balboa.SO1 26 97
29 Jan 1944

Ref: (a) Ltr from ComPaSeaFron and Com. 15, dated 21 Jan 1944, with enclosure.

1. The following instructions, issued by the Commander Panama Sea Frontier and Com. 15 in reference (a), are published for the information and guidance of all officers concerned with the routing or sailing of ships to the Canal Zone:

"Under wartime arrangement between the Commandant and the Governor of The Panama Canal, quarantine regulations for ships entering Cristobal and Balboa Harbors are supervised and enforced by the District Medical Officer of the Fifteenth Naval District for vessels of the U. S. Navy having only Navy and Army officers and enlisted personnel aboard. In accordance with this arrangement, the following instructions will govern:

"(a) All U. S. Navy ships entering Cristobal or Balboa shall hoist the quarantine flag upon entering harbor and shall keep the quarantine flag flying until pratique has been granted. If a U. S. Navy ship enters Cristobal or Balboa not flying the quarantine flag, the Harbor Entrance Control Post concerned will instruct them to do so.

"(b) U. S. Navy ships having medical officers or pharmacist's mates aboard and which are not proceeding direct to Naval Station, Coco Solo if arriving from sea, shall, upon arrival off Cristobal or Balboa, inform Harbor Entrance Control Post, Cristobal or Harbor Entrance Control Post, Balboa as to whether or not any communicable diseases or civilian passengers are on board, and request pratique. If no communicable diseases or civilian passengers are reported, the Harbor Entrance Control Post concerned, without reference to higher authority, shall signal the ship "PRATIQUE GRANTED X HAUL DOWN QUARANTINE FLAG". If communicable diseases or civilian passengers are reported on board, the Harbor Entrance Control Post concerned will immediately report same to the Operations Watch Officer who will in turn immediately inform the District Medical Officer or officer designated by him who will take necessary action. The Harbor Entrance Control Posts will inform the Operations Officer, Panama Sea Frontier of such action and will keep an accurate record of messages received from ships requesting pratique and replies to such requests. The Operations Watch Officer will note in his log the receipt of all such messages from the Harbor Entrance Control Posts and his (OWO) action.

"(c) All ships berthing at Coco Solo after arriving from sea will be visited by a medical officer from the Naval Station, Coco Solo, who will grant or refuse pratique as the situation warrants. This medical officer will keep a complete record as to what ships have been granted pratique, or in the case that pratique was refused, the circumstances surrounding same.

"(d) No personnel from any naval ship shall be permitted ashore or contact with the shore until pratique has been granted.

"(e) The above instructions do not apply to ships assigned Panama Sea Frontier which have proceeded to sea from the Canal Zone and have not touched port during their absence from the Canal Zone. These instructions do apply to ships assigned to the Panama Sea Frontier if, during their absence from the Canal Zone, they have touched port, except in the Republic of Panama.

"(f) In the case of two or more U. S. Navy ships in company, the Task Force, Group or Unit Commander or the Senior Officer of the group may make the report and request for pratique required by paragraph (b) for the U. S. Navy ships in company. When this is done it is incumbent upon the Harbor Entrance Control Posts to record the names of all ships included in such request.

"(g) Attention is invited to the fact that these instructions do not apply to merchant ships or ships with civilian crews although carrying U. S. troops. The granting of pratique for such ships is strictly a function of the Chief Quarantine and Inspection Officer of the Panama Canal." --OpNav. W. S. Farber.

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To: All Ships and Stations. BuMed:R3:JNR
Subj: Damaged Health Records, Disposition of. P3-5/P19-1(034)
Ref: (a) Paragraph 2210, Manual of the Medical Department. 18 Jan 1944

1. The Bureau has received a number of requests for information as to what disposition should be made of health records which have become covered with oil, watersoaked, or otherwise damaged to such an extent as to impair their legibility and value as a permanent record.
2. Such records should be replaced by duplicate records. The duplicate should, as nearly as may be practicable, be an exact copy of the original record. It is particularly important that the data on the descriptive sheet (Form H-2) be carefully transcribed into the new record as the information contained on this sheet may be required by the Veterans' Administration to determine the individual's rights to pension or other Federal Benefits.
3. The new health record should be stamped or marked "Duplicate" on the cover, and the circumstances necessitating the preparation of the duplicate record explained in a note on a medical history sheet.
4. Health records which have been replaced by duplicate records should be forwarded to the Bureau for file with a letter of transmittal making reference to this letter.
5. Instructions for replacing health records that have been lost are contained in reference (a). --BuMed. Ross T. McIntire.

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To: All Ships and Stations. BuMed:R1:JLA
Subj: Health Records, Disposition of. P3-5/P19-1(034)
Ref: (a) Paragraphs 2202 (c), (d), (e); 2205 (c) and 2206 (d), Manual of the Medical Department.
(b) BuMed ltr P3-5/P19-1(034), R-VC, dated 30 Mar 1943.

1. The health records of persons who have been discharged from the service or whose service has been terminated by reason of resignation, retirement, desertion, or death should be promptly closed out and forwarded to the Bureau without delay. These records are essential in the settlement of claims for pensions and other benefits submitted to the Veterans' Administration. Attention is invited to the instructions in references (a) and (b).

Medical Department, U.S.N., are being printed for distribution to holders of the manual for insertion therein. Upon receipt of revised letter, the old letter effective as of July 1939 will be discontinued and appropriate change noted on "Table of Contents," Appendix D, Circular Letter I.

2. In order to facilitate the mailing of the subject revised letter, the senior officers of activities are directed to determine the number of both office and personal copies of the Manual of the Medical Department, U.S.N., that are on hand, and forward requests to BuMed for the corresponding number of copies required of subject letter. Reproduction of subject Circular Letter I, Appendix D, follows:

BUREAU CIRCULAR LETTER I

Subject: Weekly Report of Patients in Naval Hospitals, Bed Capacity, Distribution, and Certain Classifications - NavMed I (3419, 3553, 3555).

(a) INSTRUCTIONS FOR LETTERED COLUMNS.

Column A. Remaining Last Report. - Enter number of patients as indicated on form; entries under Remaining Last Report must agree with those reported as Remaining This Report on previous week.

Column B. Admitted During Week. - Enter number of patients actually admitted during week ending Wednesday at midnight, as indicated on report. "Others" (under supernumeraries) should include retired officers and enlisted men, and patients not specified in listing.

Column C. Discharged During Week. - Enter number of patients actually discharged during the week.

Column D. Remaining This Report. - The total remaining must represent the entire number of patients carried on the sick list and under treatment on the date of the report, and must agree with the total of Beds Occupied in column F.

Column E. Existing Bed Capacities on 8-Ft. Centers. - The number reported in this column is the bed capacity based on 8-foot centers and is subdivided into beds allocated to officers, to enlisted men, and to enlisted women.

Column F. Beds Occupied. - The total figure of beds occupied, subdivided as officers on active duty, enlisted men on active duty, enlisted women on active duty, and all classes of supernumerary patients, must equal the Total Remaining in column D. All patients who are carried on the sick list and under treatment but are subsisted at home, must be included in the number of Beds Occupied of column F under the appropriate heading. Hospital ships will report only accommodations for patients in this column.

Column G. Classification of Veterans' Administration Patients Remaining. In order to compile a special report for the Director of the Veterans' Administration, patients who are beneficiaries under that administration will be classed as to number in this column as provided under the headings, Tuberculous, Psychotic, Other N. P., and General. Total of this grouping must equal the number reported as Veterans' Administration in column D.

2. It is also requested that all medical-department activities be directed to check the health records on hand and forward to this Bureau any health records on file of persons who have been separated from the service or detached from the ship or station and whose present station of duty cannot be determined.

--Bumed. Ross T. McIntire.

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To: All Ships and Stations. BuMed:R1:JLA
P2-3(084-42)

Subj: Prescriptions for Spectacle Lenses to be
Entered in Health Record. 24 Jan 1944

Ref: (a) BuMed ltr of 5 Oct 1943; N.D. Bul. of 15 Oct 1943, R-1485.

1. It is directed that whenever lenses are prescribed for correction of visual defects by a medical officer, the prescription be entered in the health record on Form H-3(1940) in the space provided for refractions in the special duty abstract. In the event Form H-3(1940) is not contained in the health record of a man for whom lenses have been prescribed, a copy of the prescription shall be entered on the medical-history sheet. Prescriptions obtained from other than naval sources which provide satisfactory correction should be similarly recorded when practical.

2. It is desirable that the man concerned be furnished a copy of the prescription and that he be advised to carry it with him.

3. Copies of the recorded lens prescription should be furnished mobile optical units if practical in the event manufacture of new lenses is necessary.

--BuMed. Ross T. McIntire.

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To: All Ships and Stations. BuMed:Y:VS
A3-3/A9-6(122-42)

Subj: Weekly Hospital Report of Patients, NavMed I
(3419, 3553, 3555). Circular Letter I, Appendix D, Manual of the Medical Department, U.S.N. -
Revision of, Effective at Once.

Ref: (a) Weekly Report of Patients in Naval Hospitals, Bed Capacity,
Distribution, and Certain Classifications - Form I, Manual of the
Medical Department, U.S.N., paragraphs 3419, 3553, and 3555.

1. The subject letter, and form (a), have been revised, and as reproduced herein are effective at once. Copies of revised Circular Letter I, Appendix D, Manual

Column H. Summary of Communicable Diseases. - List in summary form the number of patients (active-duty personnel) remaining on date of the report for each of the diagnoses included in classes VIII-IX-X-XIII, Navy Nomenclature.

(b) INSTRUCTIONS FOR NUMBERED COLUMNS.

Columns 1 and 2. - Enter the names and rank of all patients who are officers (Navy and Marine) on active duty, nurses, midshipmen, or Naval Reserve officers on active duty who have been admitted or discharged during the period of the report, or whose diagnosis has been established or changed in any way.

Column 3. - Use terms of Navy nomenclature and enter diagnosis and key letter under which patient was received as a transfer; or if established or changed, enter accordingly.

Column 4. - Enter name of place from which patient was received; if established or changed, enter words CHANGE OF DIAGNOSIS or ESTABLISHED, as case may be.

Column 5. - Enter date, expressed in figures, taken up as a readmission, diagnosis established, or change of diagnosis.

Column 6. - Enter date of disposition expressed in figures.

Column 7. - For Bureau use, express condition as follows:

C - Convalescent.

F - Favorable.

U - Unfavorable.

S - Serious.

Column 8. - Enter date patient is considered as available for duty. In case of actual discharge from the sick list as D, DD, IS, Ran, or T, so indicate. If T (transfer), state place to which transferred as a patient.

3. It will be noted that all on page 2 after column 8 has been deleted.

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NAVMED I
(Revised 1943)

WEEKLY HOSPITAL REPORT OF PATIENTS
To the Bureau of Medicine and Surgery

U. S. Date
(Name and location of hospital or hospital ship) (For week ending Wednesday)
Forwarded.....(MC), U. S. N.
(Signature)

Patients	: Remaining	: Admitted	: Discharged	: Remaining
	: Last Report	: During Week	: During Week	: This Report
	: (A)	: (B)	: (C)	: (D)
Active Duty . . . . .	.....	.....	.....	.....
Supernumeraries--	:	:	:	:
Vet. Administration	.....	.....	.....	.....
Emp. Comp. Comm.	.....	.....	.....	.....
Pensioners. . . . .	.....	.....	.....	.....
Others . . . . .	.....	.....	.....	.....
TOTAL . . . . .	.....	.....	.....	.....
Existing Bed Capacities on 8-Foot Centers	: Beds Occupied		: Classification of	
	:		: Veterans' Administration	
	:		: Patients Remaining	
(E)	(F)		(G)	
Officers.	Officers . . . . .	.....	Tuberculous ..	.....
Enlisted men	Enlisted men . . . . .	.....	Psychotic. . . . .	.....
Enlisted women.	Enlisted women . . . . .	.....	Other N. P. . . . .	.....
	Supernumeraries.....	.....	General . . . . .	.....
TOTAL	TOTAL . . . . .	.....	TOTAL . . . . .	.....

(H) Summary of Communicable Diseases--(List by Diagnosis-Class VIII-IX-X-XIID):

(LIST PATIENTS ON REVERSE)

* *

NAVMED I Sheet No.....
WEEKLY HOSPITAL REPORT OF PATIENTS--FOLLOWING SHEET

Name : (1)	Rank : (2)	Diagnosis : (3)	Patient : (4)	Date Received : (5)	Date Admit-From : (6)	Date Dis- charged : (7)	Condition : (8)	Probable Date Fit for Duty
.....
.....
.....
.....

--BuMed. Ross T. McIntire.